

# Best Management Practices for Construction and Development Projects Missouri Bladderpod

Lesquerella filiformis

Common name • Missouri Bladderpod Scientific name • Lesquerella filiformis Federal status • Threatened State status • Endangered

## **Purpose and Use**

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. Contact the Department for management information.

## **Ecology**

Missouri Bladderpod is a herbaceous annual plant that occurs on limestone glades and rocky roadsides in southwest Missouri. In Missouri it is found in Dade, Greene, Christian, and Lawrence counties. Missouri Bladderpod can be locally abundant in rocky grazed pastures and along roadsides. Bladderpod seeds drop to the ground in late May and early June, lie dormant through the summer, and germinate in fall. After germination, the plant spends the winter as a rosette (a cluster of leaves near the ground). Stems are produced in spring and Bladderpod flowers from April to May.

#### **Reasons for Decline**

Missouri Bladderpod depends on open glade habitat and is threatened by encroachment of woody vegetation and exotic cool season grasses. Much of the available habitat for Missouri Bladderpod has been lost through urbanization and conversion of native landscapes to exotic pasture grasses.

### **Specific Recommendations**

Projects planned within the Missouri range of Missouri Bladderpod should include a survey of the project area for the presence of limestone glades or limestone outcrops. The presence of numerous eastern red cedar trees are often linked to Missouri Bladderpod habitat. Habitat should be surveyed for Missouri Bladderpod presence between November 1 and June 1, with best results obtained in early May during flowering.

- Limit construction to areas of deeper soil, away from limestone outcrops and glades.
- Missouri Bladderpod benefits from proper glade management, including prescribed fire (in August), and will tolerate some grazing.
- Prevent heavy colonization of limestone glades by woody plants, especially eastern red cedar, by use of cutting and prescribed burning.

- Maintain native glade vegetation by controlling aggressive exotic plants such as tall fescue, downy chess, Japanese chess, and musk thistle.
- Avoid non-specific herbicide use in areas of Missouri Bladderpod between October and July. Monocotspecific herbicides may be used as needed.
- Avoid heavy grazing and grazing during flowering and fruiting periods (March-July).

#### **Information Contacts**

For species information:

#### Missouri Department of Conservation

Resource Science Division
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

#### U.S. Fish and Wildlife Service

Ecological Services 101 Park Deville Drive, Suite A Columbia, Missouri 65203-0007 Telephone: 573-234-2132

For Clean Water Act Coordination:

#### Missouri Department of Natural Resources

Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/751-1300, 800/361-4827

## U.S. Army Corps of Engineers

Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816/983-3990

#### **U.S. Environmental Protection Agency**

Water, Wetlands, and Pesticides Division 901 North 5th Street Kansas City, KS 66101 Telephone: 913/551-7307

#### Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws may affect construction practices. Please contact the appropriate agency for further coordination.